Abstract

Method and system for performing event detection and object tracking in image streams by installing in field, a set of image acquisition devices, where each device includes a local programmable processor for converting the acquired image stream that consist of one or more images, to a digital format, and a local encoder for generating features from the image stream. These features are parameters that are related to attributes of objects in the image stream. The encoder also transmits a feature stream, whenever the motion features exceed a corresponding threshold. Each image acquisition device is connected to a data network through a corresponding data communication channel. An image processing server that determines the threshold and processes the feature stream is also connected to the data network. Whenever the server receives features from a local encoder through its corresponding data communication channel and the data network, the server provides indications regarding events in the image streams by processing the feature stream and transmitting these indications to an operator.